

A B S T R A C T

A gastroplasty band, as disclosed herein, comprises a flexible strip designed to be closed around the stomach of a patient by a closure mechanism. The flexible strip includes an annular compression chamber connected by a catheter to a device for
5 adjusting the diameter of the compression chamber by injecting or withdrawing fluid. The compression chamber comprises a dorsal reinforcement extended by lateral walls. The dorsal reinforcement is made out of a first elastomer material having predetermined hardness d_1 on the Shore A scale. The lateral walls are made out of a second elastomer material of the same kind as the first elastomer material but of
10 predetermined hardness d_2 on the Shore A scale such that $d_2 < d_1$. The annular compression chamber thus has a hardness on the Shore A scale that varies across its thickness.